

## CLAIMS

1. (Original) A method for the preparation of a dispersion of zinc sulfide particles doped with copper (ZnS:Cu), said method comprising the step of performing a precipitation by mixing together a zinc salt, a sulfide, and a citrate or EDTA complex of copper ions, dissolved in several aqueous solutions.
2. (Original) A method according to claim 1 wherein said precipitation is performed according to the double jet principle, whereby a first solution containing said zinc salt and said citrate or EDTA complex of copper ions, and a second solution containing said sulfide are added simultaneously to a third solution.
3. (Previously Amended) A method according to claim 1 wherein said copper ions are copper (I) ions.
4. (Currently Amended) A method according to claim 3 1 wherein said copper (I) ions are incorporated as copper (I) chloride citrate or EDTA complex of copper ions is prepared by combining copper (I) chloride with a citrate or an EDTA salt.
5. (Currently Amended) A method according to any of claim 1 further comprising the step of subjecting the mixture

formed by said precipitation step to a diafiltration and/or ultrafiltration treatment.

6. (Original) A method according to claim 5 wherein said diafiltration and/or ultrafiltration treatment is performed in the presence of a compound preventing agglomeration of said ZnS:Cu particles.

7. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method ~~according to claim 1~~ for the preparation of a dispersion of zinc sulfide particles doped with copper (ZnS:Cu), said method comprising the step of performing a precipitation by mixing together a zinc salt, a sulfide, and a citrate or EDTA complex of copper ions, dissolved in several aqueous solutions.

8. (Previously Entered) A method according to claim 2 wherein said copper ions are copper (I) ions.

9. (Currently Amended) A method according to claim 8 wherein said copper (I) ions are incorporated as copper (I) chloride citrate or EDTA complex of copper ions is prepared by combining copper (I) chloride with a citrate or an EDTA salt.

10. (Currently Amended) A method according to any of claim 2 further comprising the step of subjecting the mixture formed by said precipitation step to a diafiltration and/or ultrafiltration treatment.

11. (Previously Entered) A method according to claim 10 wherein said diafiltration and/or ultrafiltration treatment is performed in the presence of a compound preventing agglomeration of said ZnS:Cu particles.

(B)

12. (Previously Entered) A method according to any of claim 3 further comprising the step of subjecting the mixture formed by said precipitation step to a diafiltration and/or ultrafiltration treatment.

13. (Previously Entered) A method according to claim 12 wherein said diafiltration and/or ultrafiltration treatment is performed in the presence of a compound preventing agglomeration of said ZnS:Cu particles.

14. (Previously Entered) A method according to any of claim 4 further comprising the step of subjecting the mixture formed by said precipitation step to a diafiltration and/or ultrafiltration treatment.

15. (Previously Entered) A method according to claim 14 wherein said diafiltration and/or ultrafiltration treatment is

performed in the presence of a compound preventing agglomeration of said ZnS:Cu particles.

16. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method ~~according to claim 2 for the preparation of a dispersion of zinc sulfide particles doped with copper (ZnS:Cu)~~, said method comprising the step of performing a precipitation by mixing together a zinc salt, a sulfide, and a citrate or EDTA complex of copper ions, dissolved in several aqueous solutions, wherein said precipitation is performed according to the double jet principle, whereby a first solution containing said zinc salt and said citrate or EDTA complex of copper ions, and a second solution containing said sulfide are added simultaneously to a third solution.

B

17. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method ~~according to claim 3 for the precipitation of a dispersion of zinc sulfide particles doped with copper (ZnS:Cu)~~, said method comprising the step of performing a precipitation by mixing together a zinc salt, a sulfide, and a citrate or EDTA complex of copper

ions, dissolved in several aqueous solutions, wherein said copper ions are copper (I) ions.

18. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 4 17, wherein said citrate or EDTA complex of copper ions is prepared by combining copper (I) chloride with a citrate or an EDTA salt.

*By  
Cont*

19. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 5 for the preparation of a dispersion of zinc sulfide particles doped with copper (ZnS:Cu), said method comprising the step of performing a precipitation by mixing together a zinc salt, a sulfide, and a citrate or EDTA complex of copper ions, dissolved in several aqueous solutions, wherein said method further comprises the step of subjecting the mixture formed by said precipitation step to a diafiltration and/or ultrafiltration treatment.

20. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 6 19, wherein said diafiltration and/or ultrafiltration treatment

is performed in the presence of a compound preventing  
agglomeration of said ZnS:Cu particles.

21. (Canceled)

22. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 8 16,  
wherein said copper ions are copper (I) ions.

*B1*  
23. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 9 18,  
wherein said precipitation is performed according to the double jet principle, whereby a first solution containing said zinc salt and said citrate or EDTA complex of copper ions, and a second solution containing said sulfide are added simultaneously to a third solution.

24. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 10 19,  
wherein said precipitation is performed according to the double jet principle, whereby a first solution containing said zinc salt and said citrate or EDTA complex of copper

ions, and a second solution containing said sulfite are added simultaneously to a third solution.

25. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 11 24, wherein said diafiltration and/or ultrafiltration treatment is performed in the presence of a compound preventing agglomeration of said ZnS:Cu particles.

*31  
Cont*

26. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 12 17, wherein said method further comprises the step of subjecting the mixture formed by said precipitation step to a diafiltration and/or ultrafiltration treatment.

27. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu particles prepared by a method according to claim 13 26, wherein said diafiltration and/or ultrafiltration treatment is performed in the presence of a compound preventing agglomeration of said ZnS:Cu particles.

28. (Currently Amended) A Thin Film Inorganic Light Emitting Diode device comprising a coated layer containing ZnS:Cu

particles prepared by a method according to claim 14 18,  
wherein said method further comprises the step of  
subjecting the mixture formed by said precipitation step to  
a diafiltration and/or ultrafiltration treatment.

29. (Currently Amended) A Thin Film Inorganic Light Emitting  
Diode device comprising a coated layer containing ZnS:Cu  
particles prepared by a method according to claim 15 28,  
wherein said diafiltration and/or ultrafiltration treatment  
is performed in the presence of a compound preventing  
agglomeration of said ZnS:Cu particles.

(B)